

WHAT IS CLAIMED IS:

1. An image processing apparatus for determining whether or not a chromatic color is included within image data having a predetermined number of pixels in each of a first direction and a second direction orthogonal to the first direction, said apparatus comprising:

first determination means for temporarily determining for each pixel string in the first direction that the pixel string is a chromatic pixel string, when a frequency of appearance of pixels determined to be chromatic according to a predetermined condition consecutively by a first number is larger than a second number;

second determination means for determining a frequency of appearance of the pixel string temporarily determined by said first determination means consecutively by a third number; and

third determination means for determining whether or not a chromatic color is included in the image data, based on a result of determination by said first determination means and a result of determination by said second determination means.

2. An image processing apparatus according to Claim 1, wherein at least one of the first number and the second number, and the third number have different values.

3. An image processing apparatus according to Claim 1 or 2, wherein said third determination means determines that the image data includes a chromatic color when the number of pixel strings temporarily determined by

said first determination means equals at least a fourth number, and the frequency determined by said second determination means equals at least a fifth number.

4. An image processing apparatus according to any one of Claims 1 through 3, wherein the image data is read by sequentially scanning an image of an original in the first direction and the second direction.

5. An image forming apparatus comprising:

an image processing apparatus according to any one of Claims 1 through 4,

wherein image formation is performed by providing a color image from the image data determined to include the chromatic color by said image processing apparatus, and providing a monochromatic image from image data other than the determined image data.

6. An image forming apparatus according to Claim 5, further comprising image reading means for reading an image of an original by sequentially scanning the image in the first direction and the second direction, and supplying said image processing apparatus with read data as the image data.

7. An image forming apparatus according to Claim 6, wherein determination by said image processing apparatus is performed for image data not to be subjected to image formation.

8. An image forming apparatus according to Claim 6, wherein determination by said image processing apparatus is performed for image data to be subjected to image formation.

9. A method for controlling an image processing apparatus for determining whether or not a chromatic color is included within image data having a predetermined number of pixels in each of a first direction and a second direction orthogonal to the first direction, said method comprising:

a first determination step of temporarily determining for each pixel string in the first direction that the pixel string is a chromatic pixel string, when a frequency of appearance of pixels determined to be chromatic according to a predetermined condition consecutively by a first number is larger than a second number;

a second determination step of determining a frequency of appearance of the pixel string temporarily determined in said first determination step consecutively by a third number; and

a third determination step of determining whether or not a chromatic color is included in the image data, based on a result of determination in said first determination step and a result of determination in said second determination step.

10. A method according to Claim 9, wherein at least one of the first number and the second number, and the third number have different values.

11. A method according to Claim 9 or 10, wherein in said third determination step, it is determined that the image data includes a chromatic

color when the number of pixel strings temporarily determined in said first determination step equals at least a fourth number, and the frequency determined in said second determination step equals at least a fifth number.

12. A method according to any one of Claims 9 through 11, wherein the image data is read by sequentially scanning an image of an original in the first direction and the second direction.

13. A storage medium, capable of being read by a computer, storing a program for controlling an image processing apparatus for determining whether or not a chromatic color is included within image data having a predetermined number of pixels in each of a first direction and a second direction orthogonal to the first direction, said program comprising:

a program code of a first determination step of temporarily determining for each pixel string in the first direction that the pixel string is a chromatic pixel string, when a frequency of appearance of pixels determined to be chromatic according to a predetermined condition consecutively by a first number is larger than a second number;

a program code of a second determination step of determining a frequency of appearance of the pixel string temporarily determined in said first determination step consecutively by a third number; and

a program code of a third determination step of determining whether or not a chromatic color is included in the image data, based on a result of determination in said first determination step and a result of determination in said second determination step.